

CLAIMS

We claim:

1. A method of operating a signaling processor for a call having a signaling message and a user
5 communication, the method comprising:

receiving the signaling message for the call indicating a called number;
processing the called number to transfer a number portability query;
receiving a number portability response indicating a route number;
processing the route number to select an identifier for routing the user communication;

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transferring a control message indicating the user communication and the identifier to a
communication system, wherein the communication system, in response to the control message,
adds the identifier to a header of the user communication and routes the user communication
based on the identifier in the header.

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2. The method of claim 1 wherein the signaling message comprises a signaling system seven
message.

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3. The method of claim 1 wherein the signaling message comprises an integrated services digital
network message.

4. The method of claim 1 further comprising:

processing the route number from the number portability response to select a connection
for routing the user communication; and

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transferring another control message indicating the identifier and the connection to the
communication system, wherein the communication system, in response to the other control
message, routes the user communication over the connection.

5. The method of claim 1 further comprising:

receiving another signaling message for the call indicating call termination;

in response to the other signaling message, transferring another control message

indicating the call termination to the communication system, wherein the communication system

5 terminates the call in response to the other control message.

6. The method of claim 1 wherein the number portability query and the number portability response comprise signaling system seven messages.

10 7. The method of claim 1 further comprising processing the signaling message to select echo cancellation for the call.

8. The method of claim 1 wherein the identifier comprises an asynchronous transfer mode virtual identifier.

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9. The method of claim 1 wherein the communication system receives the user communication over a DS0 connection.

10. The method of claim 1 wherein the signaling processor is not integrated with a switch central
20 processing unit that is coupled to a switch matrix.

11. A signaling processor for a call having a signaling message and a user communication, the method comprising:

an application configured to process a called number from the signaling message to generate a number portability query, process a route number from a number portability response to select an identifier for routing the user communication, and generate a control message indicating the user communication and the identifier; and

a platform configured to receive the signaling message, transfer the number portability query, receive the number portability response, and transfer the control message to a communication system, wherein the communication system, in response to the control message, adds the identifier to a header of the user communication and routes the user communication based on the identifier in the header.

12. The signaling processor of claim 11 wherein the signaling message comprises a signaling system seven message.

13. The signaling processor of claim 11 wherein the signaling message comprises an integrated services digital network message.

14. The signaling processor of claim 11 wherein:

the application is configured to process the route number from the number portability response to select a connection for routing the user communication and generate another control message indicating the identifier and the connection; and

the platform is configured to transfer the other control message to the communication system, wherein the communication system, in response to the other control message, routes the user communication over the connection.

15. The signaling processor of claim 11 wherein:

the application is configured to generate another control message indicating call termination in response to another signaling message for the call indicating call termination;

the platform is configured to receive the other signaling message and transfer the other control message to the communication system, wherein the communication system terminates the call in response to the other control message.

16. The signaling processor of claim 11 wherein the number portability query and the number portability response comprise signaling system seven messages.

5 17. The signaling processor of claim 11 wherein the application is configured to process the signaling message to select echo cancellation for the call.

18. The signaling processor of claim 11 wherein the identifier comprises an asynchronous transfer mode virtual identifier.

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19. The signaling processor of claim 11 wherein the communication system receives the user communication over a DS0 connection.

20. The signaling processor of claim 11 wherein the signaling processor is not integrated with a
15 switch central processing unit that is coupled to a switch matrix.